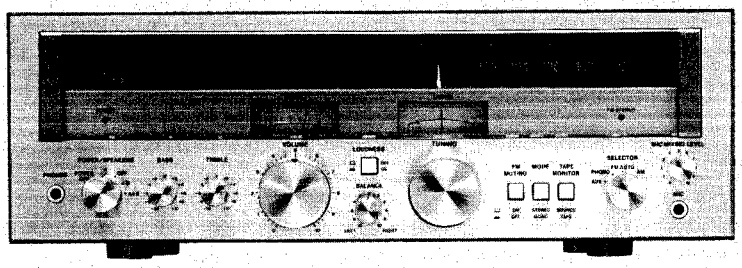
SERVICE MANUAL

AM/FM STEREO RECEIVER

SANSUI G-2000/3000



Sansui

SANSUI ELECTRIC CO., LTD.

SPECIFICATIONS

G-2000

Audio section
Power output
Min. RMS, both channels driven, from 20 to 20,000Hz, with no more than 0.2% total hramonic distortion.
16 watts per channel into 8 ohms
16 watts per channel into 4 ohms
Load impedance . . . . . 4 and 8 ohms
Total harmonic distortion
. . . . . less than 0.2% at or below rated min. RMS power output
Intermodulation distortion (70Hz: 7kHz = 4:1 SMPTE method) . . . . . less than 0.2%
Frequency response (at 1 watt)
. . . . . 10 to 50,000Hz +1dB −2dB
RIAA curve deviation (PHONO)
. . . . . +0.5dB −0.5dB (30 to 15,000Hz)
Damping factor . . . . . approximately 30 at 8 ohms load
Input sensitivity and impedance (1kHz, for rated power output)
PHONO . . . . . 2.5mV/47 kilohms
(Max. input capability; 200mV at 1kHz, less than 0.5% total harmonic distortion)
AUX, TAPE . . . . . 150mV/47 kilohms
Output level (1kHz)
TAPE REC (pin jack) . 150mV/47 kilohms
(DIN) . . . 43mV
Channel separation (1kHz, at rated power output)
PHONO . . . . . better than 50dB
AUX . . . . . better than 50dB
Hum and noise (short-circuit, A network)
PHONO 75dB
AUX 90dB
Controls
BASS . . . . . ±10dB (50Hz)
TREBLE . . . . . ±10dB (10kHz)
LOUDNESS (−30dB) . 7dB at 50Hz
5dB at 10kHz

FM section
Tuning range . . . . . 88 to 108MHz
Usable sensitivity
Mono IHF 11.0dBf (1.95μV)
DIN 1.2μV
Stereo IHF 19.0dBf
50dB Quieting sensitivity
Mono 18dBf
Stereo 39dBf
Signal to noise ratio (at 65dBf)
Mono 70dB
Stereo 67dB
Distortion (at 65dBf)
Mono . . . . . less than 0.2% at 100Hz
less than 0.18% at 1,000Hz
less than 0.3% at 6000Hz
Stereo . . . . . less than 0.3% at 100Hz
less than 0.25% at 1,000Hz
less than 0.4% at 6000Hz
Alternate channel selectivity (at 400kHz)
. . . . . 50dB
Capture ratio 1.5dB
Image response ratio . . . 48dB (at 98MHz)
Spurious response ratio . 70dB (at 98MHz)
Stereo separation . . . . . 30dB at 100Hz
40dB at 1,000Hz
28dB at 10,000Hz
Frequency response . . . 30 to 15,000Hz +1.5dB −2dB
Antenna input impedance
. . . . . 300 ohms balanced
75 ohms unbalanced

AM section
Tuning range . . . . . 530 to 1,600kHz
Usable sensitivity (Bar antenna)
. . . . . 50dB/m (300μV/m)
Selectivity 35dB
Signal to noise ratio . . . 46dB
Power requirements
Power voltage 100, 120, 220, 240V (50/60Hz)
120V (Usable 110 - 130V)
60Hz
(for U.S.A. and Canada only)
Power consumption
Rated consumption . 90 watts 100 VA
Dimensions . . . . . 433mm (17-1/16") W
153mm (6-1/16") H
352mm (13-7/8") D
Weight . . . . . 7.3kg (16.1 lbs) net
8.7kg (19.2 lbs) packed

* Design and specifications subject to change without notice for improvements.

SPECIFICATIONS

G-3000

Audio section

Power output
Min. RMS, both channels driven, from 20 to 20,000Hz, with no more than 0.15% total hramonic distortion.
26 watts per channel into 8 ohms
26 watts per channel into 4 ohms
Load impedance . . . . . 4 and 8 ohms
Total harmonic distortion
. . . . . less than 0.15% at or below rated min. RMS power output
Intermodulation distortion (70Hz: 7kHz = 4:1 SMPTE method) . . . . . less than 0.15%
Frequency response (at 1 watt)
. . . . . 10 to 50,000Hz +1dB −2dB
RIAA curve deviation (PHONO)
. . . . . +0.5dB −0.5dB (30 to 15,000Hz)
Damping factor . . . . . approximately 30 at 8 ohms load
Input sensitivity and impedance (1kHz, for rated power output)
PHONO . . . . . 2.5mV/47 kilohms
(Max. input capability; 200mV at 1kHz, less than 0.5% total harmonic distortion)
AUX, TAPE . . . . . 150mV/47 kilohms
Output level (1kHz)
TAPE REC (pin jack) . 150mV/47 kilohms
(DIN) . . . 43mV
Channel separation (1kHz, at rated power output)
PHONO . . . . . better than 50dB
AUX . . . . . better than 50dB

Hum and noise (short-circuit, A network)
PHONO 75dB
AUX 90dB
Controls
BASS . . . . . ±10dB (50Hz)
TREBLE . . . . . ±10dB (10kHz)
LOUDNESS (−30dB) . 7dB at 50Hz
5dB at 10kHz

FM section

Tuning range . . . . . 88 to 108MHz
Usable sensitivity
Mono IHF 11.0dBf (1.95μV)
DIN 1.2μV
Stereo IHF 19.0dBf
50dB Quieting sensitivity
Mono 18dBf
Stereo 39dBf
Signal to noise ratio (at 65dBf)
Mono 70dB
Stereo 67dB
Distortion (at 65dBf)
Mono . . . . . less than 0.2% at 100Hz
less than 0.18% at 1,000Hz
less than 0.3% at 6,000Hz
Stereo . . . . . less than 0.3% at 100Hz
less than 0.25% at 1,000Hz
less than 0.4% at 6,000Hz
Alternate channel selectivity (at 400kHz)
. . . . . 50dB
Capture ratio 1.5dB

Image response ratio . . . 48dB (at 98MHz)
Spurious response ratio . 70dB (at 98MHz)
Stereo separation . . . . . 30dB at 100Hz
40dB at 1,000Hz
28dB at 10,000Hz
Frequency response . . . 30 to 15,000Hz +0.5dB −2dB
Antenna input impedance
. . . . . 300 ohms balanced
75 ohms unbalanced

AM section

Tuning range . . . . . 530 to 1,600kHz
Usable sensitivity (Bar antenna)
. . . . . 50dB/m (300μV/m)
Selectivity 35dB
Signal to noise ratio . . . 46dB

Power requirements

Power voltage 100, 120, 220, 240V (50/60Hz)
120V (Usable 110 ~ 130V)
60Hz
(for U.S.A. and Canada only)
Power consumption
Rated consumption . 120 watts 140 VA
Dimensions . . . . . 433mm (17-1/16") W
153mm (6-1/16") H
352mm (13-7/8") D
Weight . . . . . 8kg (17.6 lbs) net
9.4kg (20.7 lbs) packed

* Design and specifications subject to change without notice for improvements.

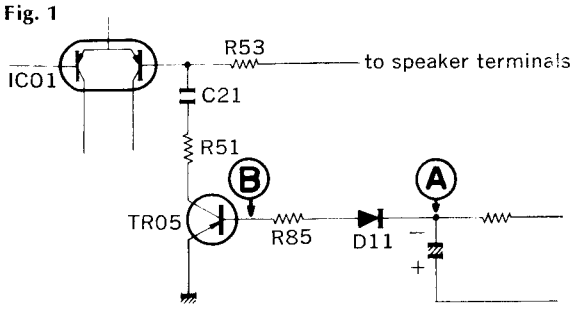
1. OPERATIONS

Pop-noise preventive circuit

In order to prevent the annoying pop-noise to the loudspeakers at turning the power of the amplifier ON, the pop-noise preventive circuit adopted in the G-3000 is the combination of the conventional driver-voltage delay type used in the power supply (rectifier) circuit and the NF delay type pop-noise preventive circuits. The configuration of NF delay type pop-noise preventive circuit is shown in Fig. 1.

In this circuit, the switching (ON-OFF) of the transistor TR05 is made by the time constant of the capacitor C40 and resistor R88. Thereby the NF resistor, R51 is controlled, and the gain of the main amplifier stage is lowered when TR05 is ON, thus the voltage drift (transient voltage) of the main amplifier at turning the power ON does not appear on the speaker terminals for very short period of time. In other words, at the instant that the power is turned ON, the voltage at the point A rises up to +13V, then the voltage decreases by means of the time constant of C40 and R88 as shown in Fig. 2. At this time, the diode D11 is inversely biased, consequently, the potential voltage of the point B is 0V as Fig. 3. Because of this, TR05 turns to the cut-off, thus the NF resistor, R51 acquires such a state as its resistance value becomes equivalently very large, which decreases the gain of the power amplifier. When the charge of the C40 is completed, the voltage of the point B (see Fig. 3) becomes negative, as a result, the diode D11 is biased. Therefore, TR05 is turned ON, and the circuit of this equipment is normally operated approximately 2 seconds after the power is turned ON to prevent the pop-noise which flows to loudspeakers.

Fig. 1



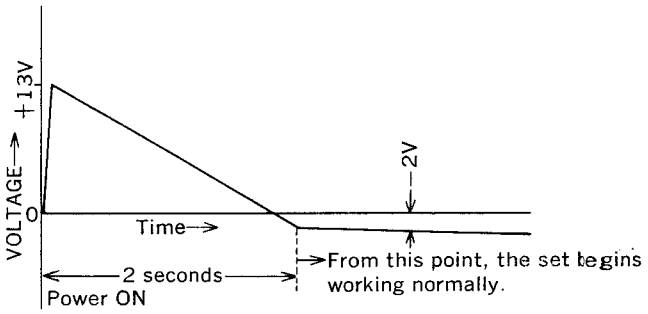


Fig. 2 Voltage variation during a certain period of time at Ⓐ

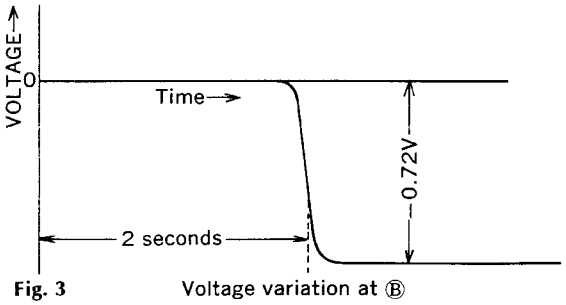
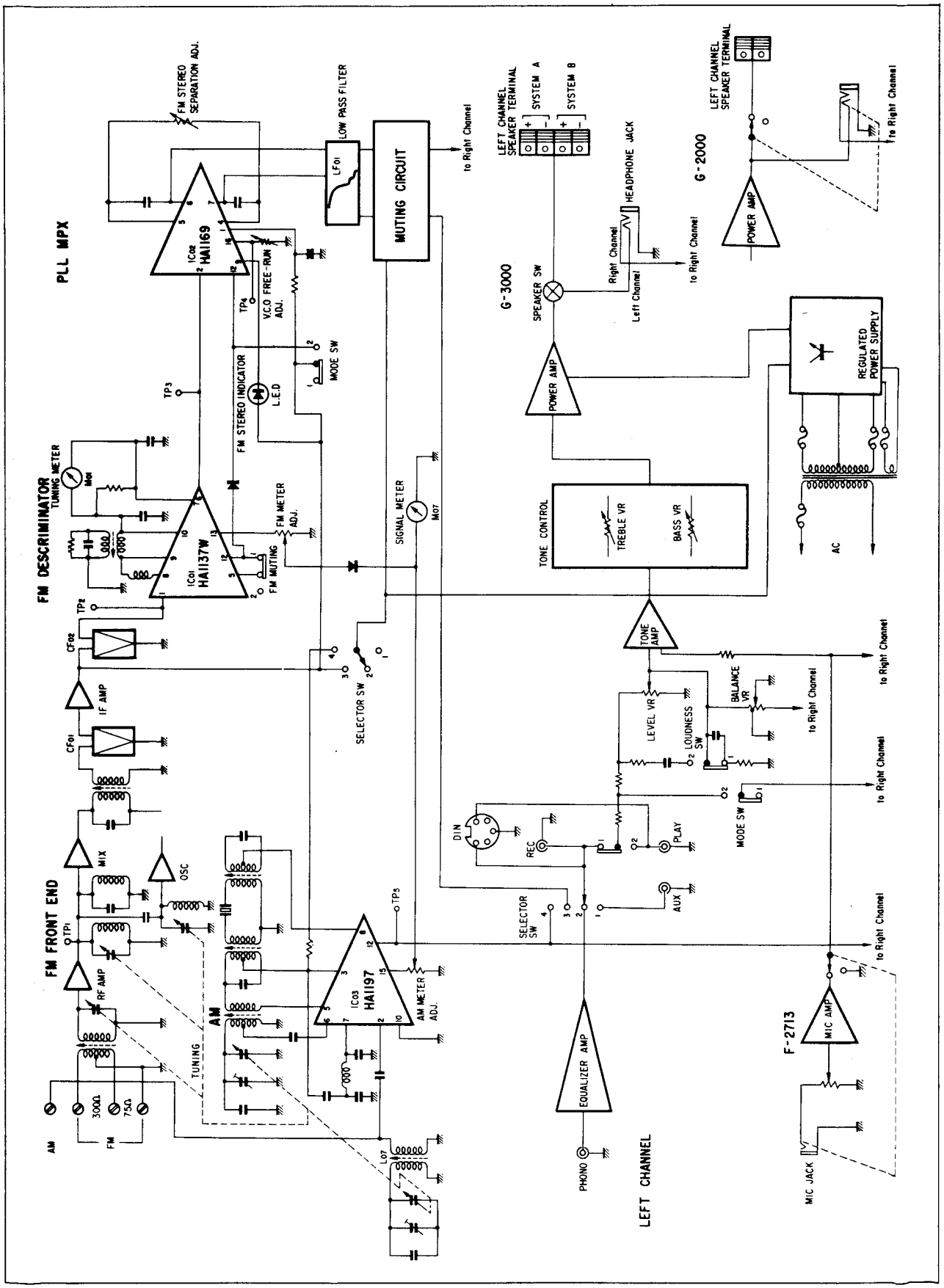


Fig. 3 Voltage variation at Ⓑ

2. BLOCK DIAGRAM

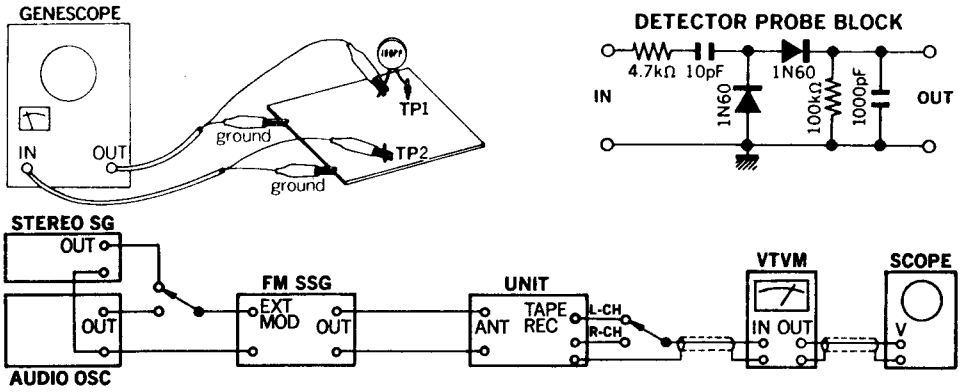


3. ADJUSTMENTS

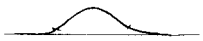
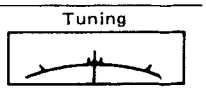
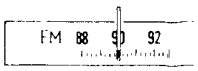
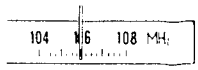
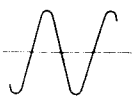
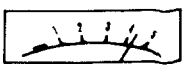
* Refer to the picture of top view indicating test points on page 4.

1) FM Adjustment

Note: 1. Selector . . . . . FM AUTO
2. FM Muting Switch . . . . . OFF
3. Connection . . Connect the output of genescope to TP through 100pF ceramic capacitor.

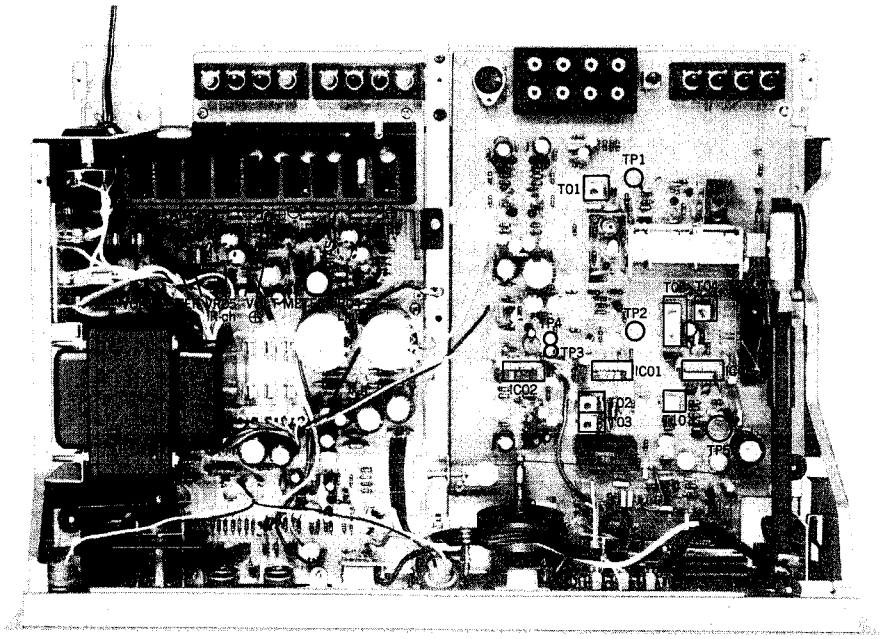


(1) FM IF Adjustment & Dial Calibration

STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	IF Coil	Output 80dB Genescope	TP1 F-2707	TP2 F-2707 Use Detector Probe	T01 F-2707	Max. IF waveform	
2.	Discriminator Coil	Same as above	Same as above	TP3 F-2707	T02, T03 F-2707	Steep linearity of S curve Make symmetrical S curve	
3.	Tuning Meter	98MHz ANT Input 65dBf (59.8dB) 1000Hz (100% MOD) FM SSG	ANT terminal 300Ω	Tuning Meter	T02 F-2707	Center on Meter	
4.	90MHz Dial Calibration	90MHz ANT Input 65dBf (59.8dB) 1000Hz (100% MOD) FM SSG	Same as above	REC terminal VTVM & Scope	L03 F-2707	Max. indication on Signal meter & Center indication on Tuning meter	
	106MHz Dial Calibration	106MHz ANT Input 65dBf (59.8dB) 1000Hz (100% MOD) FM SSG	Same as above	Same as above	TC03 F-2707		
5.	90MHz RF Adj.	90MHz ANT Input Minimum value with sine wave 1000Hz (100% MOD) FM SSG	Same as above	Same as above	L01, L02 F-2707	Same as above	
	106MHz RF Adj.	106MHz ANT Input Minimum value with sine wave 1000Hz (100% MOD) FM SSG	Same as above	Same as above	TC01, TC02 F-2707	Same as above	
6.	Signal Meter Volume	98MHz ANT Input 65dBf (59.8dB) 1000Hz (100% MOD) FM SSG	Same as above	Signal Meter	VR03 F-2707	4.3 on Meter	

(2) FM STEREO Adjustment

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	PLL VCO Adj.	98MHz ANT Input 65dBf (59.8dB) FM SSG Pilot 19kHz (9% MOD) SUB 1kHz + Pilot (100% MOD) STEREO SG	ANT terminal 300Ω	Stereo indicator	VR01 F-2707	Light indicator	Adjust the VR01 within center of lighting level.
	PLL VCO Adj. In case of using Freq. counter.	98MHz ANT Input 65dB (59.8dB) FM SSG	Same as above	TP4 F-2707 Use Freq. counter	VR01 F-2707	76kHz ±150Hz	
2.	Separation	98MHz ANT Input 65dBf (59.8dB) FM SSG Pilot 19kHz (9% MOD) R (or L) Mode 1kHz + Pilot (100% MOD) STEREO SG	Same as above	REC terminal R-CH → L-CH VTVM & Scope	VR02 F-2707	Set 34dB	Confirm separation L-CH → R-CH (34dB)



〈Top View〉

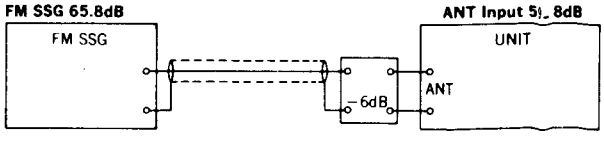
※NEW MEASUREMENT FOR FM

Input signal level under the provision of IHFM-T-200, a new measurement method is indicated by available power ratio "dBf". To obtain approximate available power ratio "dBf", abstract 0.8 from attenuator indication of general FMSG (open load indication type); however, the conventional measurement, IHFM-T-100 is designated together too.

The way of modulation on IHFM-T-200 is shown below.

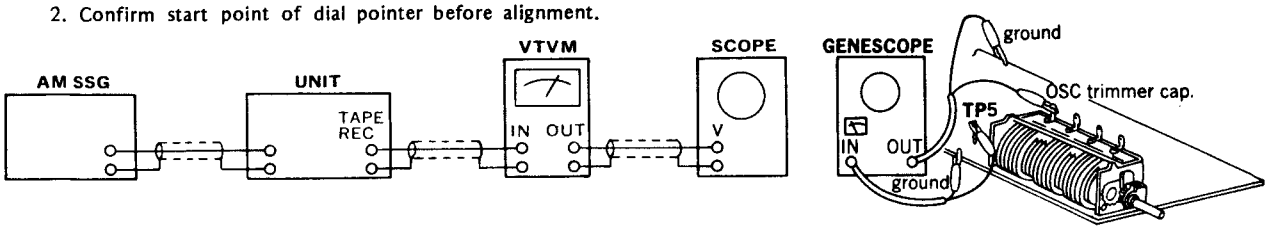
	modulation frequency	modulation mode	modulation factor
FM MONO	1000Hz		100%
FM STEREO	1000Hz	SUB	Pilot 9% Pilot + SUB 100%

※The relation between the standard input 65dBf of IHFM-T-200 and the former indication "dB" is shown in below.



2) AM IF Adjustment & Dial Calibration

Note: 1. Selector . . . . . AM
2. Confirm start point of dial pointer before alignment.



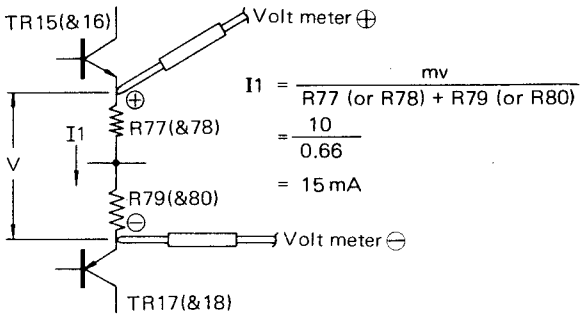
STEP	SUBJECT	FEED SIGNAL FROM	FEED SIGNAL TO	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
1.	IF Coil	Genescope Output level 70dB	TC05 F-2707	TP5 F-2707	T05 L10 F-2707	Max. IF waveform	
2.	600kHz Dial Calibration	600 kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	AM ANT terminal	REC terminal L or R-CH VTVM & Scope	T04 F-2707	Max. indication on signal meter	
	1400kHz Dial Calibration	1400kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	TC04 F-2707	Same as above	
3.	600kHz RF Adj.	600kHz ANT Input 50dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	Bar Antenna L07	Same as above	
	1400Hz RF Adj.	1400kHz ANT Input 50dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	TC05 F-2707	Same as above	
4.	Signal Meter volume	1000kHz ANT Input 80dB 400Hz (MOD 30%) AM SSG	Same as above	Signal Meter	VR04 F-2707	4.5 on meter	

3) Bias Current Adjustment (See the Picture of Top View on page 4)

1. Confirm AC power supply voltage (100V, 117V, 220V or 240V).
2. Level Volume . . . . . Minimum
3. Room Temperature . . . . . 18°C ~ 28°C (65°F ~ 83°F)
4. Before this adjustment, turn bias adjustment volumes of VR04 and VR05 fully counterclockwise, then run this unit for more than three minutes.

Note: For this adjustment, put the lead + (plus) side of volt meter and + (plus) side of R77 (& R78) and the lead − (minus) side to − (minus) side of R79 (& R80) on both channels.
L-ch R77, R79
R-ch R78, R80

(Measure output voltage on both channel)



(Power stage on F-2711)

STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJUST FOR
1	Bias Current L-CH	DC Volt meter	* See above	VR04 F-2711	10mV ±1 mV (15 mA)
2	Bias Current R-CH	DC Volt meter	* See above	VR05 F-2711	10mV ±1 mV (15 mA)

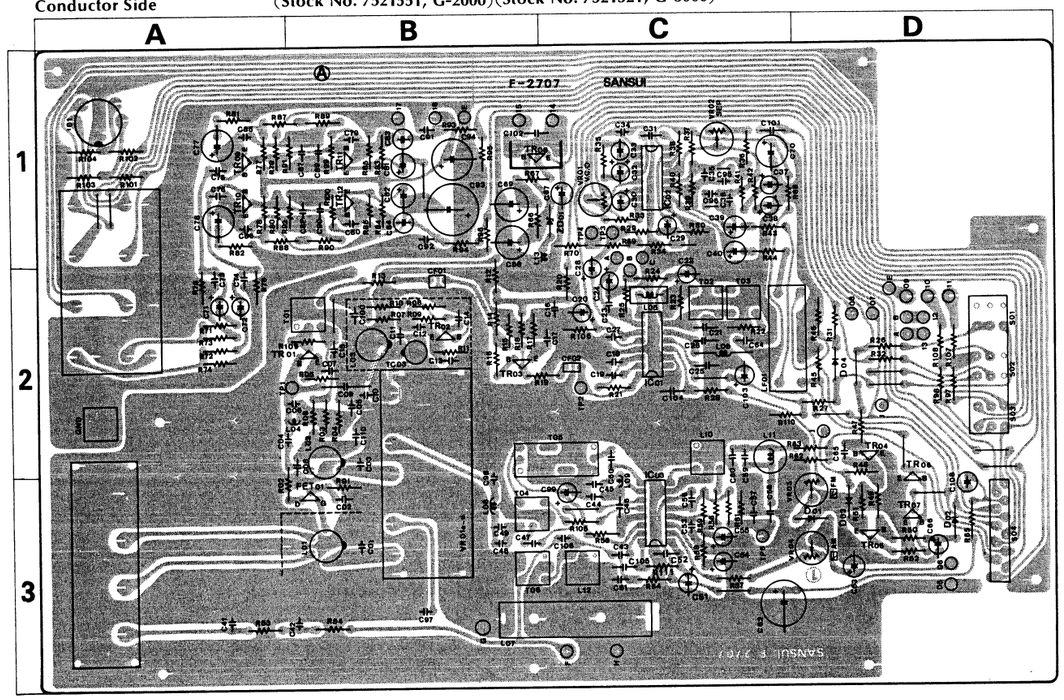
4. PARTS LOCATION & PARTS LIST

Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the Common Parts List for capacitors & resistors which was appended previously to each Sansui Manual.

1) F-2707 AM/FM Tuner & FM MPX Circuit Board

(Stock No. 7521551, G-2000)(Stock No. 7521521, G-3000)

Conductor Side



Parts List

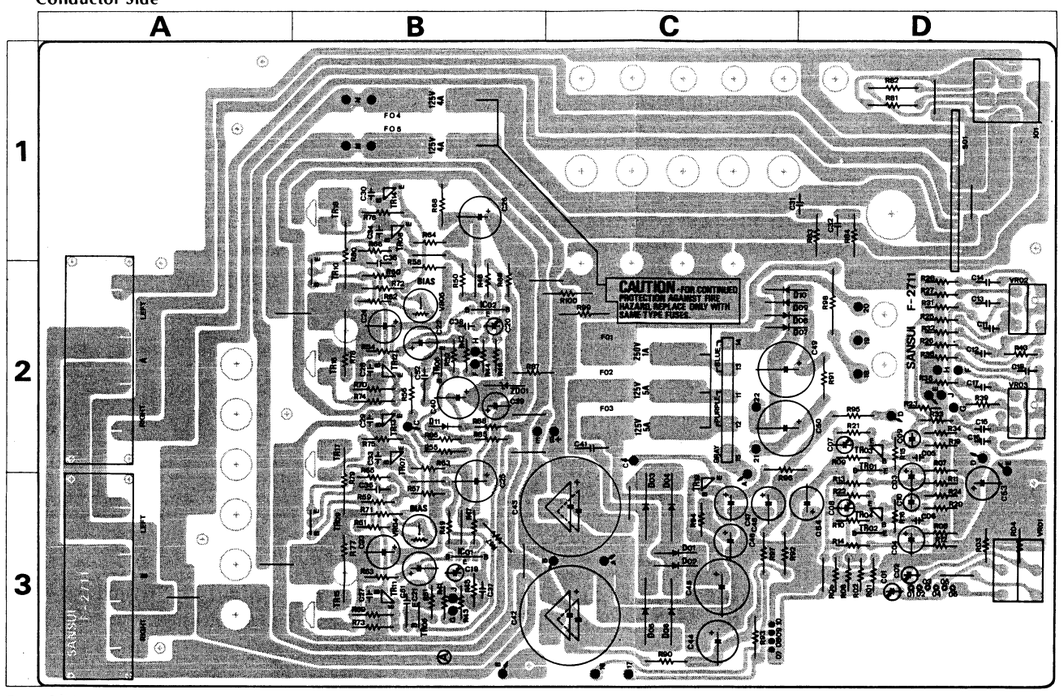
Parts No.	Stock No.	Description	Position
TR01,02	0305801,2	2SC1047 (B,C)	2B
TR03	0306341,2	2SC1674 (L,K)	2B
TR04	0305951,2	2SC945 (Q,P)	2D
TR05	0300470	2SA726W (F)	3D
TR06,07	0306390	2SC1636-1 (Transistor)	3D
TR08	0308450,1	2SD356 (C,D)	1B,C
TR09,10	0300900,1	2SA906 (G,H)	1A
TR11,12	0306070,1	2SC1313 (F,G)	2A
IC 01	0360350	HA1137W	2C
IC 02	0360320	HA1196 (IC)	1C
IC 03	0360390	HA1197	3C
FT01	0370172	2SK49 (H) FET	
D 01～04	0311160	1S2473D Diode	2,3D
ZD01	0315970	EQA01-13R Zener Diode	1C
C 01,03	0669347	12pF 50V C.C.	3B.2B
C 04	0669210	10pF 50V C.C.	2A
C 06	0669503	3pF 50V C.C.	2B
C 09	0679012	1.5pF 500V Gimmick Capacitor	2B
C 10	0669019	18pF 50V C.C.	2B
C 11,12	0669320	10pF 50V C.C.	2B
C 13	0669345	10pF 50V C.C.	2B
C 32	0573159	1.5μF 35WV T.C.	1C
C 33	0573339	3.3μF 35WV T.C.	1C
C 34	0629005	360pF 50V P.C.	1C
C 48	0669400	15pF 50V C.C.	3B
C 49	0620361	360pF 50V P.C.	3B
C 89,90	0620161	160pF 50V P.C.	1B
C 95,96	0620561	560pF 50V P.C.	1C
C 97	0669563	3pF 50V C.C.	3B
C 98	0669400	15pF 50V C.C.	3B
L 01	4200720	Antenna Coil (FM)	3B
L 02	4210340	RF Coil	2B

Parts No.	Stock No.	Description	Position
L 03	4220400	O.S.C. Coil	2B
L 04	4900140	1μH (Inductor Coil)	
L 05	4290300	18μH (Inductor Coil)	2C
L 06	4290011	Peaking Coil 3.5μH	
L 07	4200750	Antenna Coil (AM)	3C
L 08	4900140	1μH (Inductor Coil)	3B
L 09	4900110	100μH (Inductor Coil)	
L 10	4230620	IF Coil (AM)	2C
L 11	4900060	22mH Inductor	2C
T 01	4235930	IF Coil (FM)	2B
T 02	4235990,1	IF Coil	2C
T 03	4236000,1	IF Coil	2C
T 04	4220650	OSC Coil (AM)	3B
T 05	0910370	Ceramic Filter (AM)	2C
CF01,02	0910380	Ceramic Filter (FM)	
LF01	0910220	Low Pass Filter	
VR01	1034250	4.7kΩ (B) VCO Free-Run Adjusting VR	1C
VR02	1035210	220kΩ (B) Stereo Separation Adjusting VR	1C
VR03	1035150	22kΩ (B) FM Meter Adjusting VR	3D
VR04	1035110	4.7kΩ (B) AM Meter Adjusting VR	3D
S 01	1131060,1	Push Switch, FM muting	2D
S 02	1101840	Rotary Switch, selector	2D
VC01	1220210	AM FM Variable Capacitor	2,3B
TC03	1230090	Trimmer Capacitor	
J 01	2090030	5P DIN Socket	
	2210330	4P Antenna Terminal	
	2230180	Ground Terminal	
	2200410,1	8P Input Terminal	

2) F-2711 Pre/Main & Power Supply Circuit Board

(Stock No. 7571781, G-2000)
(Stock No. 7571771, G-3000)

Conductor Side



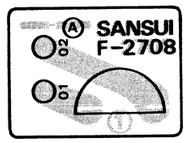
Parts List

Parts No.	Stock No.	Description	Position
TR01,02	0300470,1	2SA726W (F,G)	2D,3D
TR03,04	0306070,1	2SC1313 (F,G)	2D,3D
TR05,06	0300510,1	2SA733 (P,Q) (G-3000)	3B.2B
TR07,08	0306371,2	2SC1175 (E,F) (G-2000)	2B.1B
	0306521,2	2SC1439 (B,V) (G-3000)	
TR09,10	0305951,2	2SC945 (P,Q)	3B.2B
TR11,12	0305930,1	2SC1211 (C,D) (G-2000) (Transistor)	3B.2B
	0308521,2	2SD438 (E,F) (G-3000)	
TR13,14	0300310,1	2SA697 (C,D) (G-2000)	2B.1B
	0303361,2	2SB560 (E,F) (G-3000)	
TR15,16	0308392,3	2SD313 (E,F) (G-2000)	3B.2B
	0306541,2	2SC1986 (Q,Y) (G-3000)	
TR17,18	0303232,3	2SB507 (E,F) (G-2000)	2B.1B
	0300911,2	2SA771 (Q,Y) (G-3000	
TR19	0308521,2	2SD438 (E,F)	3C
IC 01,02	0360290,1	2SA798 (E,F)	3B.2B
D 01,02	0310340	10D1	3C
D 03～06	0310340	10D1 (G-2000) (Diode)	3C
	0311530	30D2 (G-3000) (Diode)	
D 07～10	0310340	10D1 Diode	2C
D 11	0311160	1S2473D (G-3000 only) (Diode)	2B
ZD01	0315970	EQA01-13R Zener Diode	2B
C 41	0655103	10,000pF 500V C.C.	2C
C 42,43	0549008	4,700μF 35V E.C. (G-2000)	3C
	0549009	6,800μF 35V E.C. (G-3000)	
R 55,56	0210182	1.8kΩ ½W N.I.R.	2B
R 67,68	0192101	100Ω ½W F.R.	3B.1B
R 69～72	0192221	220Ω ½W F.R.	3B.2B
R 73～76	0192689	6.8Ω ½W F.R.	1,2B
R 77～80	0212338	0.33Ω 2W N.I.R.	1,2B
R 81,82	0211221	220Ω 1W N.I.R.	1D
R 83,84	0210479	4.7Ω ½W N.I.R.	1D

Parts No.	Stock No.	Description	Position
R 87	0210272	2.7kΩ ½W N.I.R. (G-2000)	2B
	0210122	1.2kΩ ½W N.I.R. (G-3000)	
R 90	0210221	220Ω ½W N.I.R. (G-2000)	3C
	0210271	270Ω ½W N.I.R. (G-3000)	
R 91	0192220	22Ω ½W F.R.	2D
R 92	0210471	470Ω ½W N.I.R. (G-2000)	3C
	0210681	680Ω ½W N.I.R. (G-3000)	
R 93	0210121	120Ω ½W N.I.R. (G-2000)	3C
	0210331	330Ω ½W N.I.R. (G-3000)	
R 95	0210471	470Ω ½W N.I.R. (G-2000)	2D
	0210681	680Ω ½W N.I.R. (G-3000)	
R 96	0210820	82Ω ½W N.I.R. (G-2000)	2C
	0210151	150Ω ½W N.I.R. (G-3000)	
R 97	0210121	120Ω ½W N.I.R. (G-2000)	3C
	0210271	270Ω ½W N.I.R. (G-3000)	
R 98	0212829	8.2Ω 2W N.I.R.	2D
R 99,100	0211222	2.2kΩ 1W N.I.R.	2C
VR01	1011130,1	250kΩ (B) x 2 Level Volume	3D
VR02	1015300,1	100kΩ x 2 Bass Volume	2D
VR03	1015300,1	100kΩ x 2 Treble Volume	2D
S 01	1101850	Rotary Switch (SP Selector) G-3000 only	1D
F 01	0432220	1A 250V	2C
F 02,03	0432280	4A 125V Fuse (G-2000)	2C
	0432290	5A 125V AC Fuse (G-3000)	
J 01	2430380	Head Phone Jack Socket (G-2000)	1D
	2430360	Head Phone Jack Socket (G-3000)	
	2210340	4P Output Terminal	
	2310220	Fuse Holder (Large)	

3) F-2708 Circuit Board for Signal Meter
(Stock No. 7521561, G-2000) (Stock No. 7521531, G-3000)

Conductor Side

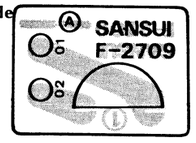


Parts List

Parts No.	Stock No.	Description
M01	4301110, 1	Signal Meter

4) F-2709 Circuit Board for Tuning Meter
(Stock No. 7521571, G-2000) (Stock No. 7521541, G-3000)

Conductor Side

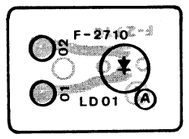


Parts List

Parts No.	Stock No.	Description
M02	4301120, 1	Tuning Meter

5) F-2710 Circuit Board for Stereo Indicator
(Stock No. 7540801, G-2000) (Stock No. 7540811, G-3000)

Conductor Side

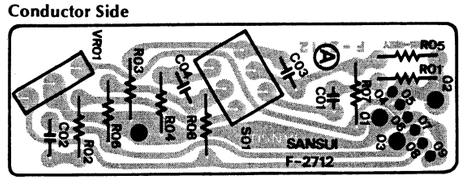


Parts List

Parts No.	Stock No.	Description
LD01	0319060	Light Emitted Diode

6) F-2712 Loudness Circuit Board
(Stock No. 7561951, G-2000) (Stock No. 7561961, G-3000)

Conductor Side

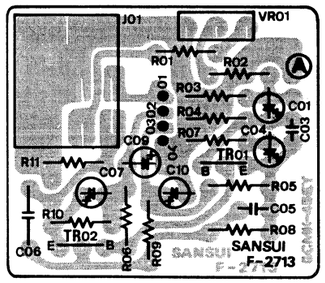


Parts List

Parts No.	Stock No.	Description
VR01	1005350, 1	250kΩ (B)x 2 Balance Volume
S 01	1131490, 1	Push Switch, loudness

7) F-2713 Microphone Amp Circuit Board
(Stock No. 7610161, G-2000) (Stock No. 7610151, G-3000)

Conductor Side

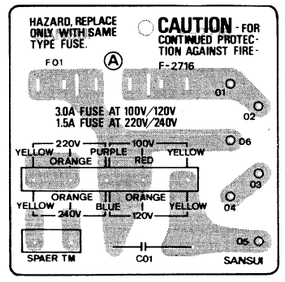


Parts List

Parts No.	Stock No.	Description
TR01	0300470, 1	2SA726W (F, G) } Transistor
TR02	0306070, 1	2SC1313 (F, G) } Transistor
VR01	1005340, 1	20kΩ (A) Mixing Volume
J01	2430370	Mic. Jack Socket

8) F-2716 Voltage Selector Circuit Board
(Stock No. 7502491, G-2000) (Stock No. 7502501, G-3000)

Conductor Side



Parts List

Parts No.	Stock No.	Description
C 01	0659802	0.004μF 150V C.C.
F 01	0432230	1.5A 250V
	0432250	2.5A 250V (G-2000) } AC Fuse
	0432260	3A 250V (G-3000) } AC Fuse
	2310220	Fuse Holder (Large)

Abbreviations

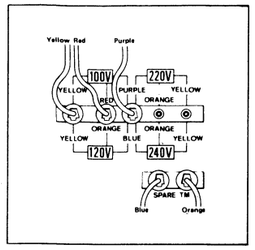
C.R.	:	Carbon Resistor	**E.C.**	:	Electrolytic Capacitor
S.R.	:	Solid Resistor	**BP.E.C.**	:	Bi-Polar Electrolytic Capacitor
Ce.R.	:	Cement Resistor	**C.C.**	:	Ceramic Capacitor
M.R.	:	Metal Film Resistor	**MI.C.**	:	Mica Capacitor
F.R.	:	Fusing Resistor	**O.C.**	:	Oil Capacitor
N.I.R.	:	Non-Inflammable Resistor	**P.C.**	:	Polystyrene Capacitor
M.C.	:	Mylar Capacitor	**T.C.**	:	Tantalum Capacitor

NOTE:

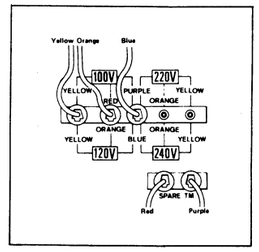
◇ **Changing Power Supply Voltage:** (This is applicable for universal type of G-2000/3000 only).
Your unit is adjusted to operate at the correct power supply voltage of your area prior to shipment from over factory. If you move to an outside country after purchasing it or send it as a gift to a friend living in an area where the voltage is different, it may be necessary to operate at the correct power supply voltage.

◇ When necessary, remove the bonnet from the unit and reconnect leads from power supply circuit board as described below in accordance with the required voltage (100V, 120V, 220V or 240V).

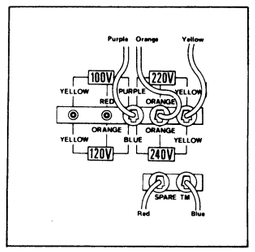
1) For 100V



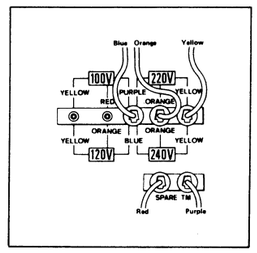
2) For 120V



3) For 220V



4) For 240V



5. PARTS REPLACEMENT

1) Square Knobs of Loudness, FM Muting, Mode & Tape Monitor

1. Take off a wood bonnet, front & inside panels.
2. Then, pull out knobs to which are not glued as Fig. 1.

2) Tuning & Signal Meter

1. Complete 1. & 2. above.
2. Take off the meter as Fig. 2, then put it back into same place until snapped.

3) Level Volume

1. Take off the two panels and one nut for level volume.
2. Then, unsolder six points installing the level volume on pattern side of F-2711 printed board.

Fig. 1

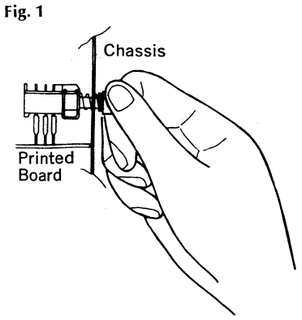


Fig. 2

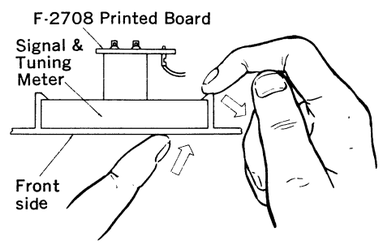
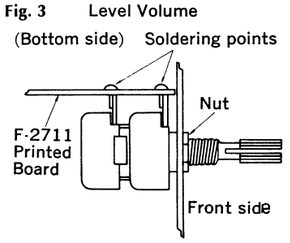
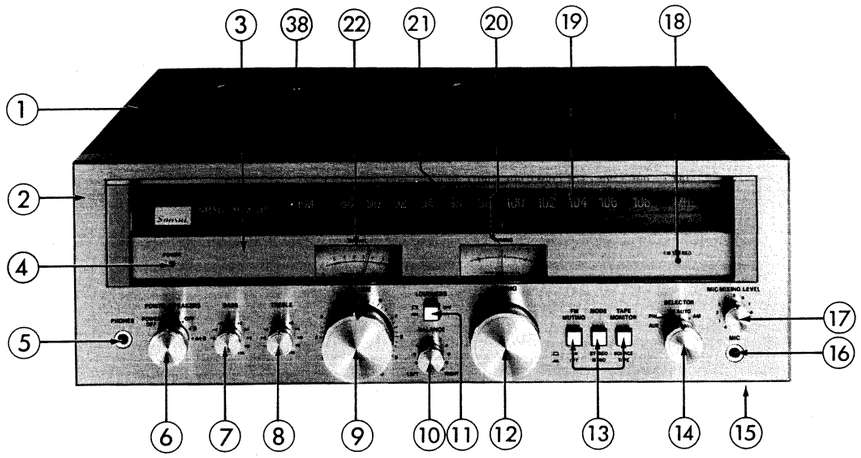


Fig. 3 Level Volume

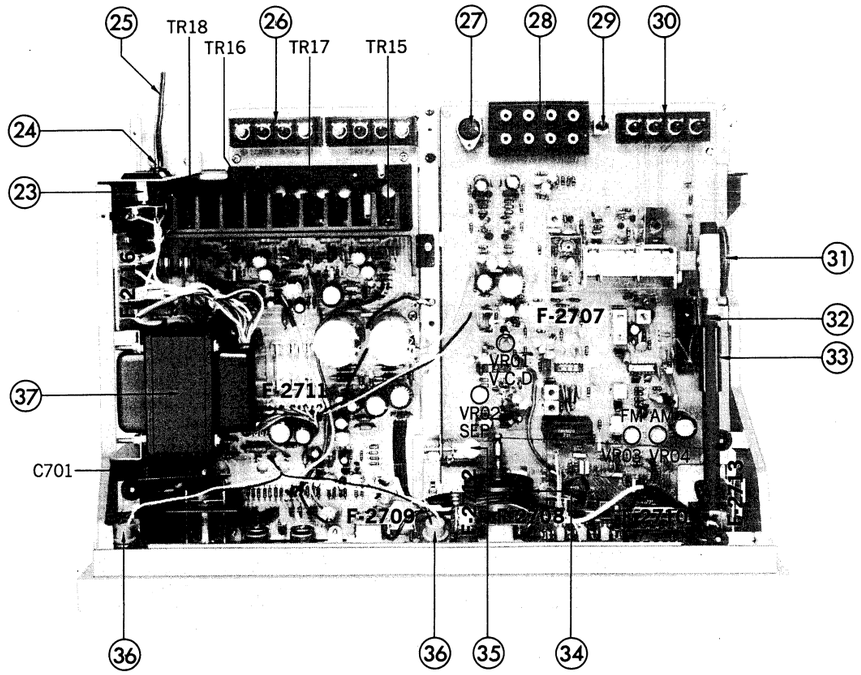


6. OTHER PARTS

〈Front View〉



〈Top View〉



Parts List (Front & Top view)

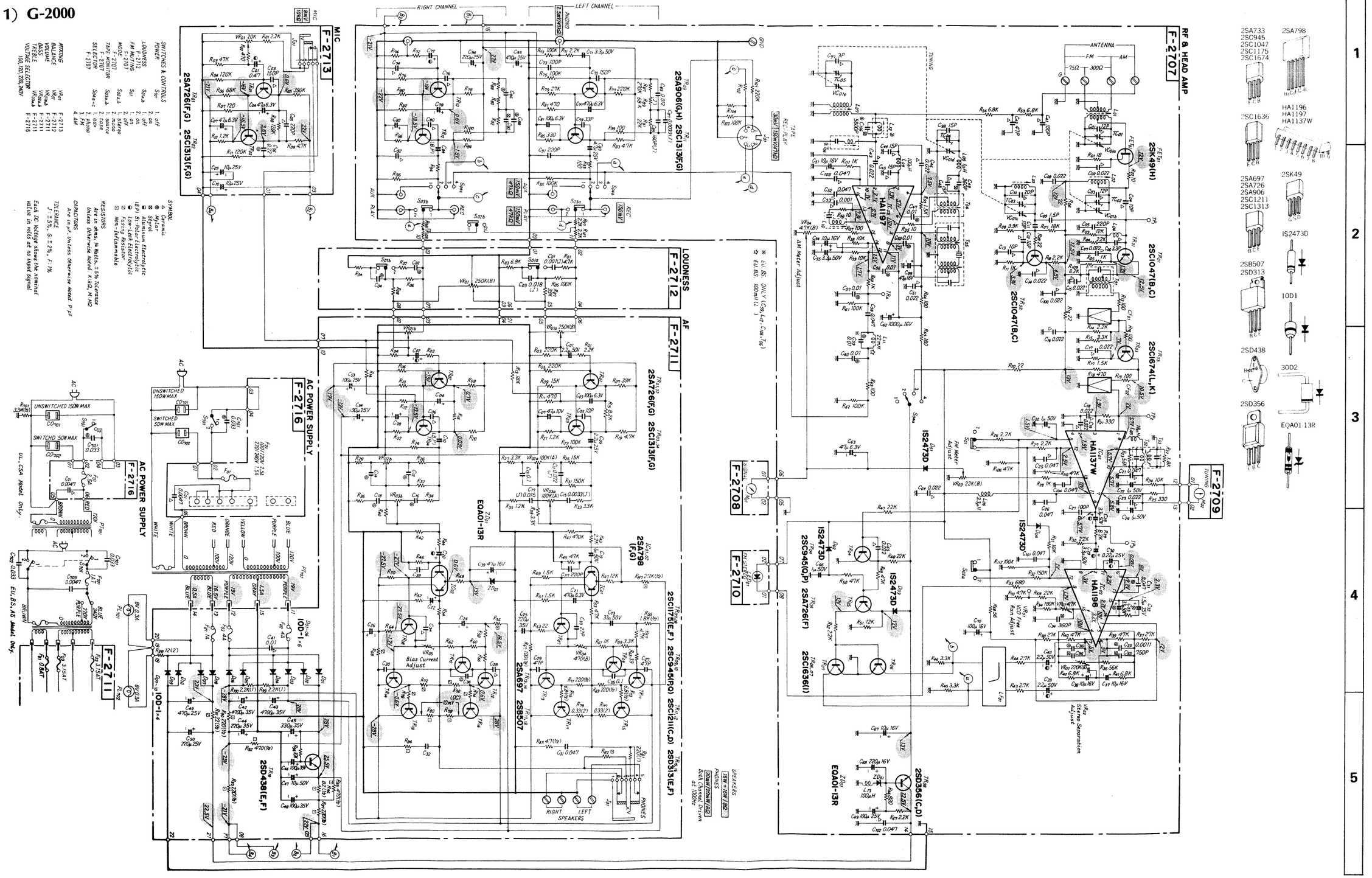
Parts No.	Stock No.	Description
1	5727060	Wood Bonnet
	5236690	W.B. Type Bushing
2	7007640	Front Panel Ass'y (G-2000)
	7007630	Front Panel Ass'y (G-3000)
3	5305690	Inside Panel
4	5426410	Power Illuminator Bar
5	2430380	Head Phone Jack Socket (G-2000)
	2430360	Head Phone Jack Socket (G-3000)
6	5319140	Power & Speakers Switch Knob
	1190530	Power & Speakers Rotary Switch (G-2000)
	1101850	Power & Speakers Rotary Switch (G-3000)
	5236470	M9 x 7, spacer nut
7	5319130	BASS Volume Knob
	1015300, 1	100kΩ x 2 Bass Volume
8	5319130	Treble Volume Knob
	1015300, 1	100kΩ x 2 Treble Volume
9	5318980	Volume Knob
	1005350, 1	250kΩ (B) x 2 Volume
10	5319130	Balance Volume Knob
	1005350, 1	250kΩ x 2 (B) Balance Volume
11	5326690	Loudness Switch Knob
	1131490, 1	Loudness Switch
12	5318970	Tuning Knob
13	5326690	Knob, tape monitor switch
	1131060, 1	Tape Monitor Switch
14	5319140	Selector Switch Knob
	1101840	Selector Switch
	5236470	M9 x 7, spacer nut
15	5058790	Bottom Plate
	5517250	Leg
16	2430370	Microphone Jack Socket
17	5319130	Microphone Mixing Volume Knob
	1005340, 1	20kΩ (A) Mic Mixing Volume

Parts No.	Stock No.	Description
18	0319060	L.E.D., FM Stereo Indicator
	5289180	L.E.D. Holder
	5136030	Plastic Rivet
19	5408200	Dial Scale (G-2000)
	5408190	Dial Scale (G-3000)
	5305720	Backside Panel for dial scale
20	7116030	Dial Pointer Ass'y
21	4301120, 1	Tuning Meter
22	4301110, 1	Signal Meter
23	2450060	AC Outlet
24	3910600	AC Cord Clip
25	3800010, 4	AC Cord
26	2210340	4P Output Speaker Terminal (G-3000)
27	2090030	5P DIN Socket
28	2200410, 1	8P Input Terminal
29	2230180	Ground Terminal
30	2210330	4P Antenna Terminal
31	6146670	D-44 Type Pulley
32	4200750	Bar Antenna
33	5289170	Bar Antenna Holder
34	7036540	Tuning Unit
35	7136100	Tension Unit
36	0400560	Pilot Lamp Ass'y
37	4002660	Power Transformer (G-2000)
	4002650	Power Transformer (G-3000)
38	5305710	Plastic Rear Panel
TR15, 16	0308392, 3	2SD313 (E, F) (G-2000)
	0306541, 2	2SC1986 (Q, Y) (G-3000) } Transistor
TR17, 18	0303232, 3	2SB507 (E, F) (G-2000)
	0300911, 2	2SA771 (Q, Y) (G-3000) } Transistor
	5288721	Plate for TR
C 701	0605337	0.033μF 250V M.C.
R 701	0111335	3.3MΩ ½W S.R. (UL, CSA only)
	1230090	Trimmer Capacitor
	1220210	AM-FM Variable Capacitor

* La présention et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
* Design and specifications subject to change without notice for improvement.

7. SCHEMATIC DIAGRAM

1) G-2000



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* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
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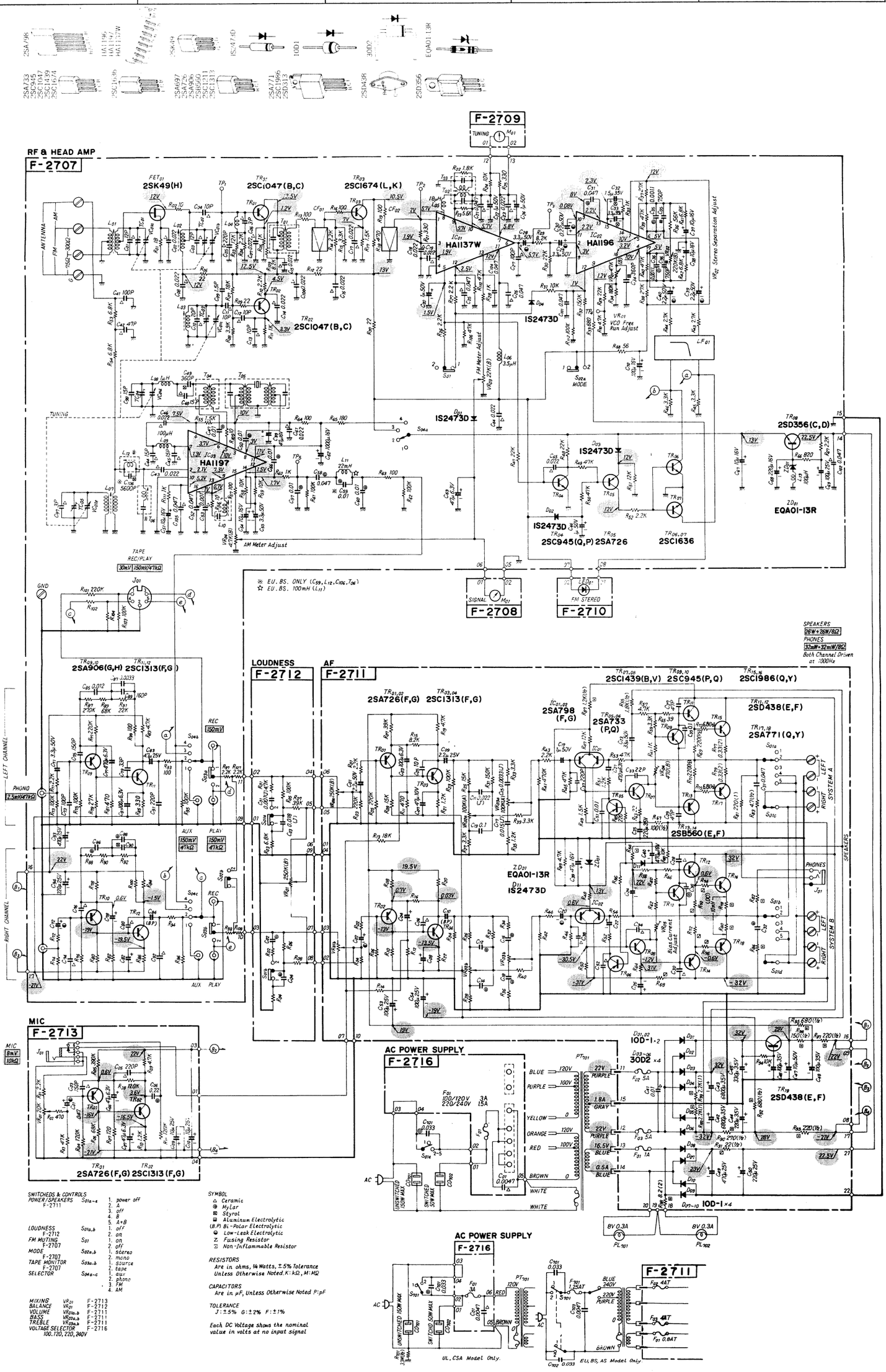


SWITCHES & CONTROLS

POWER/SPEAKERS F-2711	S01a-e	1. power off 2. A 3. off 4. B 5. A+B
LOUDNESS F-2712	S01a,b	1. off 2. on
FM MUTING F-2707	S01	1. on 2. off
MODE F-2707	S02a,b	1. stereo 2. mono
TAPE MONITOR F-2707	S03a,b	1. sour.se 2. tape
SELECTOR	S04a-c	1. aux 2. phono 3. FM 4. AM

MIXING	VR01	F-2713
BALANCE	VR01	F-2712
VOLUME	VR01a,b	F-2711
BASS	VR02a,b	F-2711
TREBLE	VR03a,b	F-2711
VOLTAGE SELECTOR 100,120,220,240V		F-2716

SYMBOL
△ Ceramic
Ⓜ Mylar
Ⓢ Styrol
■ Aluminum Electrolytic
(B.P) Bi-Polar Electrolytic
● Low-Leak Electrolytic
Z Fusing Resistor
Ⓝ Non-Inflammable Resistor

RESISTORS
Are in ohms, ¼ Watts, ±5% Tolerance
Unless Otherwise Noted K: kΩ, M: MΩ

CAPACITORS
Are in μF, Unless Otherwise Noted P: pF

TOLERANCE
J: ±5% G: ±2% F: ±1%

Each DC Voltage shows the nominal value in volts at no input signal

2) G-3000

8. THREADING OF DIAL CORD

* If a dial cord is cut off or slips, replace it by following procedures.
As this unit uses 0.5 mmϕ cord, please replace it with the same type certainly.
* The length of dial cord is approximately 160 cm (65.3 inch).

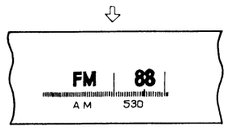


Fig. 2

:start point

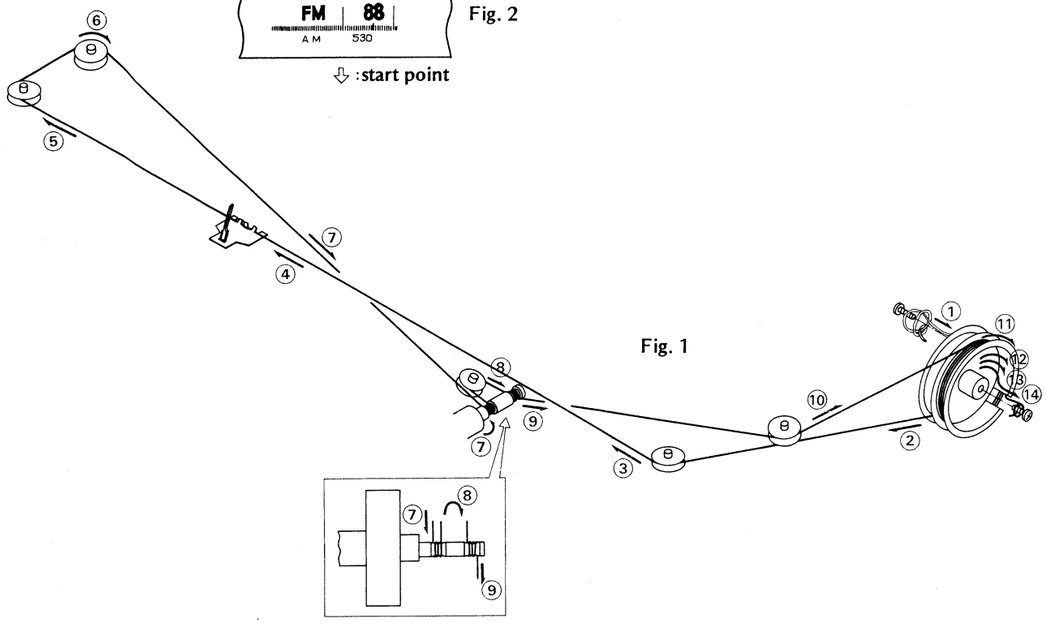


Fig. 1

Threading of Dial Cord

Thread the dial cord in numerical order from 1 to 14 as Fig. 1.
* Close the variable capacitor completely (Maximum Capacitance).

Stock No.	Description
6036050	Dial Cord (0.5 mmϕ)
6146670	Dial Pulley

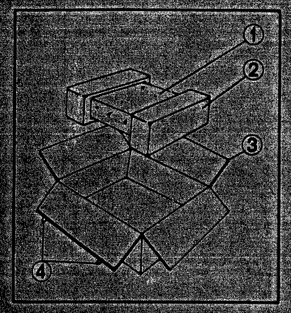
Attachment of Dial Pointer

1) Close the variable capacitor completely.
2) Set the dial pointer to start point on dial scale as Fig. 2.
* Confirm that the dial pointer runs smoothly on the dial scale by turning the turning shaft.

G-2000/3000

9. PACKING LIST

Parts No.	Stock No.	Description
1	9116143	Vinyl Cover
2	9028990	Styrofoam Packing
3	9009750	Carton Case (G-2000)
	9009740	Carton Case (G-3000)
4	5996080	Curl Stopper



10. ACCESSORY PARTS LIST

Stock No.	Description	
9202950	Operating Instructions	(G-2000)
9202940	Operating Instructions	(G-3000)
9237590	Schematic Diagram	(G-2000)
9237580	Schematic Diagram	(G-3000)
3820100	FM Antenna	

MEMO

Sansui

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